MELAtronic®EN

15 EN · 17 EN · 23 EN



The European Standard EN 13060 divides tabletop autoclaves into the classes B, S and N.

Class B is the class with the highest requirements, such as are required on clinic autoclaves.

Class S devices have less performance capability and for instance cannot be used for complicated hollow instruments or multiple wrapping.

Class N are autoclaves that can be employed for the sterilization of solid instruments.

MELA*tronic*® EN autoclaves have two "N" and two "S" programs.

Which autoclave, according to the European Standard, is appropriate for your medical or dental practice?

According to national hygiene requirements the physician or dentist is obliged to use risk assessment methods to define which types of instruments and packaging are to be used in the medical or dental practice. In other words, it be must be decided whether B, S or N should be employed.

Bacteriological expert opinions and thermoelectric measurements of the sterilizing effect of the MELA*tronic*® EN autoclaves for wrapped instruments have demonstrated that both "S" programs can sterilize small quantities of wrapped solid instruments.

MELA*tronic*® EN autoclaves are for the sterilization of solid instruments according to EN 13060.



MELAtronic® EN · Available in 3 sizes

Fractionated gravity system

The autoclaves of the MELA*tronic*® EN model series work with a fractionated, microprocessor-controlled gravity system, which rapidly reduces the content of remaining air and effectively attains saturated steam.

Temperature exactness by electronic control

To ensure a successful sterilization, the MELA $tronic^{\circ}$ EN autoclaves have two redundant temperature sensors and one precision sensor for pressure. During the program, the high graded electronic acquires data on temperature, pressure, and time. The autoclaves monitor these values and save them for documentation purposes.

"S" and "N" programs

The precise program control of the MELA*tronic*® EN autoclaves permits four different sterilization programs. In the Universal program "S", wrapped instruments can be sterilized. With the Quick program "N", a small number of quickly required unwrapped instruments are already available again after 17-21 minutes. Temperature-sensitive, unwrapped instruments can be sterilized with the Gentle program "N" at 121°C, and wrapped instruments with lengthened exposure time can be sterilized with the Prion program "S" at 134°C.

Innovative water system

Up to now, traditional autoclaves have worked exclusively with the water cycle process where the used and thus partly polluted water is always reused. The MELA*tronic*® EN autoclaves have an integrated water quality measurement feature. When the water quality in the reservoir degrades, an initial warning is issued that only a few more sterilization cycles are still possible. If the assistant does not replace the water in the reservoir, the integrated water quality measurement feature protects the instruments and the autoclaves by preventing a new autoclave start. The optimal protection from contamination by recycled circulating water is possible by connecting an external wastewater container to the autoclave. The autoclave can then be operated in the one-way water system.



According european standard 13060

MELA*print*®42 - log printer

Different national guidelines often demand that the operator documents the instrument sterilization. The documentation of the program cycles for the autoclaves of the MELA*tronic*® EN series is possible with the log printer MELA*print*®42 over the standard built-in interface (RS 232) for the following data records:

· Selected program

MELAtronic 17 EN

MELAtronic®23 EN

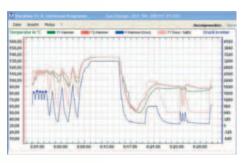
- · Date, time, batch number
- · Actual values of time, pressure and temperature
- · Confirmation of the successfully completed program
- · Inadmissible deviations, in case they occurred.

MELA *flash* **CF-Card-Printer**

The MELA*flash*-System consists of the CF-Card-Printer, the MELA*flash* CF-Card and the MELA*flash* Card-Reader. Without any further connection, the sterilization records can be very simply saved on a PC. This way you satisfy the requirements of durable reproducibility. After transmitting the data over the supplied MELA*flash* CF-Card-Reader to the practice PC, the records can be examined with any word processing program or any spreadsheet, supplemented with comments or printed out on a printer connected to the PC.

MELA*view* - Documentation-Software

With the new documentation-software MELA*view* you can handle the data of the sterilization cycles from the MELA*flash* CF-Card-Printer stored on the MELA*flash* CF-Card with your practice PC (since Windows XP) very comfortable. MELA*view* is very easy to operate and offers a very clearly displaying of the sterilization cycles. You can sort the logs very comfortable for date of sterilization, batch number, used sterilization program etc. Archiving of the data and the search for a certain sterilization protocol becomes very easy and quick.



Graphic of MELA view

Programs and times

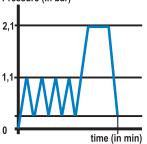
1. Quick Program "N"

Temperature: 134°C
Pressure: 2,1 bar
Time: 5 min

Operational time (without drying)

Warm start 1kg instruments 17 - 21 min Cold start 2kg instruments 22 - 29 min

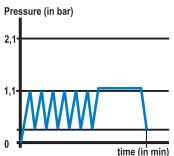
Pressure (in bar)



2. Gentle Program "N"

Temperature: 121°C
Pressure: 1,1 bar
Time: 20 min
Operational time (without drying)
Warm start 1kg instruments 37 - 47 min

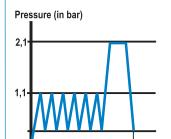
Cold start 2kg instruments 44 - 59 min



3. Universal Program "S"

Temperature: 134°C
Pressure: 2,1 bar
Time: 5 min
Operational time (without drying)

Warm start 1kg instruments 21 - 30 min Cold start 2kg instruments 27 - 38 min



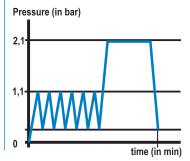
time (in min)

4. Prion Program "S"

Temperature: 134°C
Pressure: 2,1 bar
Time: 20 min

Operational time (without drying)

Warm start 1kg instruments 36 - 45 min Cold start 2kg instruments 42 - 53 min



Technical data

	MELA <i>tronic</i> ®15EN	MELA <i>tronic</i> ®17EN	MELA <i>tronic</i> ®23EN
dimensions (d x w x h) chamber (dia x depth) tray (d x w x h) power supply weigth loading quantity	50 cm x 44 cm x 33 cm	55 cm x 46 cm x 35 cm	59 cm x 52 cm x 38 cm
	dia 15 cm x 38 cm, 7 litres	dia 18 cm x 42 cm, 11 litres	dia 23 cm x 45 cm, 19 litres
	35 x 12 x 2 cm (can hold 3)	40 x 14 x 2 cm (can hold 3)	42 x 19 x 2 cm (can hold 5)
	230 Volt, 50 Hz, 1.500 Watts	230 Volt, 50 Hz, 1.500 Watts	230 Volt, 50 Hz, 1.600 Watts
	19 Kg	22 Kg	30 Kg
	2 Kg solid instruments	3 Kg solid instruments	4 Kg solid instruments

Drying

Good drying results can be achieved with the MELA*tronic*® EN autoclaves. The sterilization chamber is preheated to a pre-defined temperature by activating the "preheating" function. Condensate build-up is thereby decreased and the water consumption reduced. The "preheating" also supports post-drying. When the door is opened slightly after the automatic

pressure release at the end of the sterilization cycle, the heat in the sterilization chamber produces excellent post-drying. Good drying results can be attained by observing the loading instructions or using the foil holder for wrapped instruments. When the instruments are vertically positioned in the foil holder, the condensate quickly flows off and downwards.



Quality and precision

More than 55 years ago, MELAG began in Berlin to specialize in the manufacture of sterilization equipment. Verification of its success has been the sale of more than 410,000 units.



Decades of experience, modern computercontrolled production technology in our own plant in Berlin, the application of high grade materials and an experienced workforce make MELAG devices easy to use quality products. Our company philosophy includes the systematic concentration on one restricted production program. With its highly specialized development team, MELAG is able to retain and further develop its market-driven product line on an internationally leading technical level.

